



ataggggccccgtctcagattttggattttggtcaggagacgtgt  
tactccggggacgagtctaaaaacctaagaaccaggcctctgcaaca  
ACTAGTCGACATGAGGGCCCTGCTCAGTTTGGCTTGTG-3'  
A A C AA  
MKV4 PRIMER

49 agaaaatgagaccgtctattcagttcctggggctttgttctggcttcattgg  
tctttactctggcagataagtcaaggaccccgagaacaacaagaccgaagtacc  
[M R P S I Q F L G L L L F W L H G  
LEADER

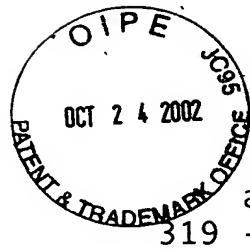
103 tgctcagtgacatccagatgacacagtcctccatcctcactgtctgcattct  
acgagtcacactgttaggtctactgtgtcagaggtaggtagtgcacagacgttagaga  
A Q C] [D I Q M T Q S P S S L S A S L  
FR1

157 gggaggcaaagtaccatcacttgcaagacaagccaagacattaacaagtatat  
ccctccgtttagtggtagtgaacgttctcggttctgttaattttcatata  
G G K V T I T C] [K T S Q D I N K Y M  
CDR1

211 ggcttggtaccaacacaaggcctggaaaacgtcctaggctgctcatacattacac  
ccgaaccatggtgtgttcggacctttcaggatccgacgagtatgtaatgt  
A] [W Y Q H K P G K R P R L L I H] [Y T  
FR2

265 atctgcattacagccaggcatccatcaagggttcagtgaaagtgggtctggag  
tagacgtaatgtcggccgttaggttagttccaagtacacccaccacc  
S A L Q P] [G I P S R F S G S G S G R  
CDR2

# FIG.1A



APPROVED	O.G. FIG.	CLASS	SUBCLASS
BY			
DRAFTSMAN			

319 agattattccttcaacatcagcaacctggagcctgaagatattgcaacttatta  
-----  
tctaataaggaaggtagtcgttgacacctcgacttctataacgttgaataat

D Y S F N I S N L E P E D I A T Y Y  
FR3

373 ttgtctacagtatgataatctgtggacgttcggaggcaccaagctggaaat  
-----  
aacagatgtcatactattagacacacctgcaagccacacctccgtggttcgaccctta

C] [L Q Y D N L W T] [F G G G T K L E I  
CDR3 FR4

MOUSE KAPPA PRIMER  
3' -GTAGAAGGGTGGTAGGTGGGCCCT  
427 caaacgggctgatgctgcaccaactgttatccatttcccaccatccacccggga  
-----  
gttgccccactacgacgtggttgacataaggtagaagggtggtaggtggccct  
K]

AGG-5'  
tcc  
481 ---  
agg

## FIG.1B



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
	DRAFTSMAN	

**ADEMARK OFF** atgaaatgcagctgggtcatgttcttcctgatggcagtggttacagg  
1 -----  
tactttacgtcgaccaggatacaagaaggactaccgtcaccaatgtcccc  
ACTAGTCGACATGAAATGCAGCTGGGTCACTTTCTTC-3'  
G

MHV1 PRIMER

[M K C S W V M F F L M A V V T G  
LEADER

```

49  gtcaattcagagggttcagctgcagcagtcggggcagagcttgtgaagccaggg
      -----
cagtttaagtctccaagtcgacgtcgtagaccggctcgaaacacttcgggtccc

V N S] [E V Q L Q Q S G A E L V K P G

```

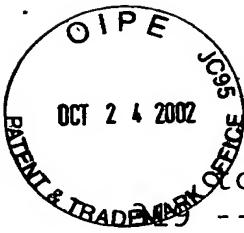
103 gcctcagtcaagggtgcacagcttctggcttaacattaaagacacat  
 -----  
 cgaggatcagttcaacaggacgtgtcgaaagaccgaagtttaattctgtggata  
 A S V K L S C T A S G F N I K] [D T Y  
 CDR1

157 atacactgtgtgaagcagaggcctgaacagggcctggagtggatttggaaaggatt  
 -----  
 tatgtgacacacttcgtctccggacttgtcccggacacctcacctaacccttcctaa  
 I H] [C V K Q R P E Q G L E W I G] [R I  
 ER2

211 gatcctgcgaatggttataactaaatatgaccgcgaagttccagggcaaggccact  
 -----  
 ctaggacgcttaccaatatgattatactgggcttcaaggtcccgttccgggtga  
 D P A N G Y T K Y D P K F Q G] [K A T  
 CDR2

265 ataaacagctgacacatcctccaaacacagcctacacctgcagtcagcagcctgaca  
 -----  
 tattgtcgactgtgttaggaggttgtgtcgatggacgtcgagtcgtcgactgt  
 I T A D T S S N T A Y L Q L S S L T  
 FR3

**FIG. 2A**



ctgaggacactgccgttatattctgtgctagagagggatattatggtaactac  
-----  
agactcctgtgacggcagataaagacacgatctctccctataataaccattgatg

S E D T A V Y F C A R] [E G Y Y G N Y  
CDR3

373 ggggtctatgctatggactactgggtcaaggaacctcagtcaccgtctcctca  
-----  
ccccagatacgtatacctgatgaccccagttccttggagtcatgtggcagaggagt

G V Y A M D Y] [W G Q C T S V T V S S]

MOUSE GAMMA-1 PRIMER

3'-GTAGACAGATAGGTGACCAGGGCCCTAGG-5  
gccaaaaacgacaccccccattctgtctatccactggcccggatcc  
427 -----  
cggttttgctgtggggtagacagataggtgaccggccctagg

S S]

**FIG. 2B**

APPROVED	O. G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

09/155739

5/16

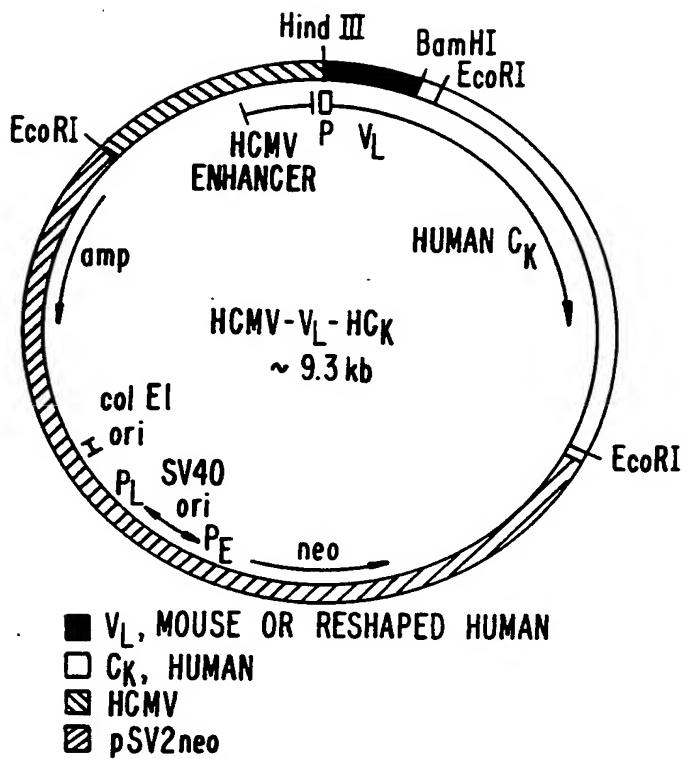


FIG. 3A.

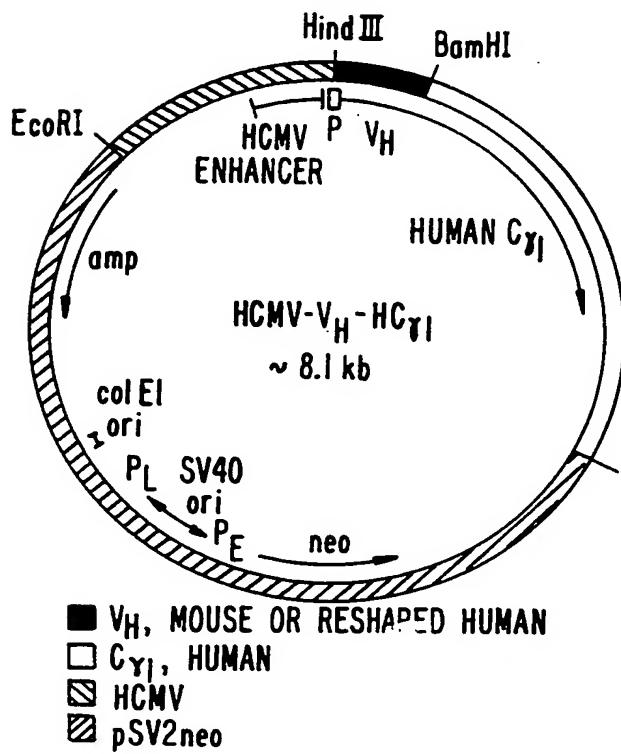


FIG. 3B.

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

RECEIVED DEPT OF GENETICS

09/155739

6/16

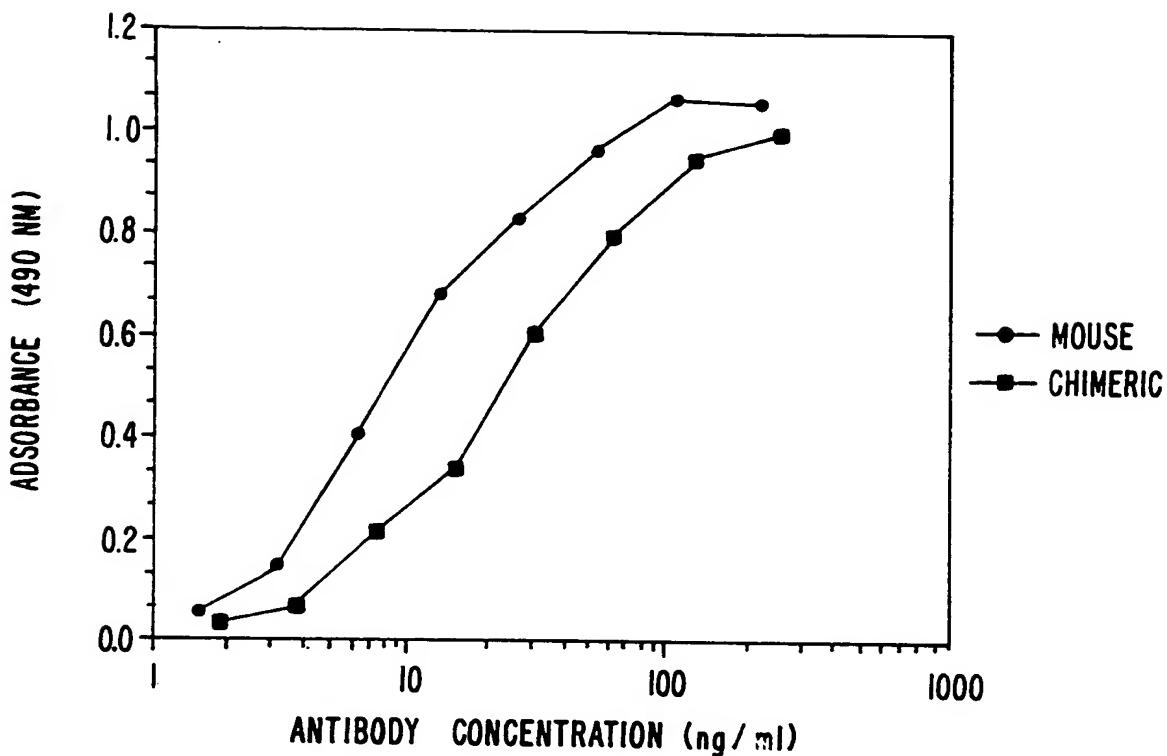


FIG. 4.

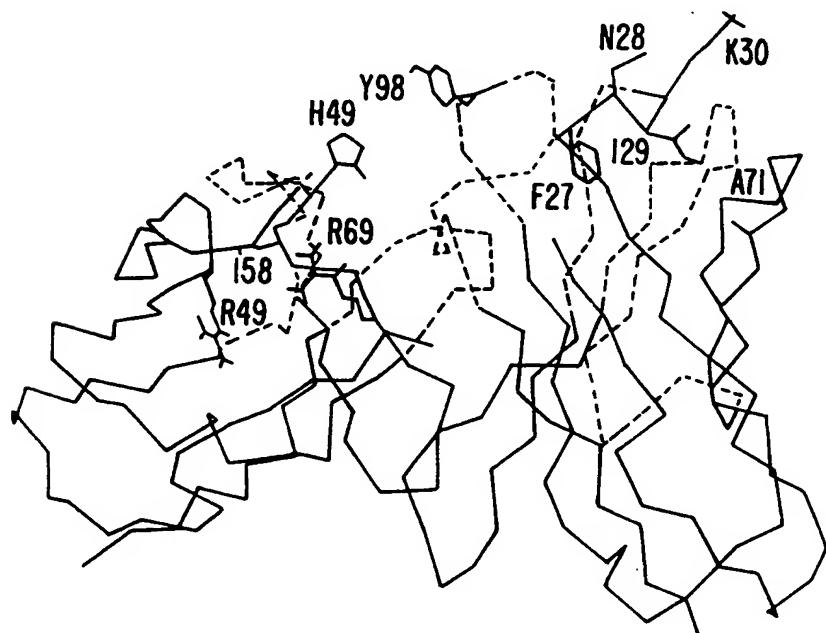


FIG. 5.

09/155739

7/16

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

GEETEGO " GEZESTGO

	FR1	CDR1	FR2	CDR2
*	1 12345678901234567890123 *****	2 45678901234 *****	3 567890123456789 *****	4 0123456 *****
21.6	DIQMTQSPSSLSASVGDRVTITC	KTSQDINKYMA	WYQHKGKPRLLIH	YTSALQP
REI	DIQMTQSPSSLSASVGDRVTITC	QASQDIKIYLN	WYQQTPGKAPKLIIY	EASNLngA
La	DIQMTQSPSSLSASVGDRVTITC	KTSQDINKYMA	WYQQTPGKAPKLIIH	YTSALQP
Lb	- - - - -	- - - - -	- - - - -	R - - - - -
	FR3	FR4	CDR3	FR4
*	6 78901234567890123456789012345678 *	7 901234567 *	8 901234567 *****	9 8901234567 *****
21.6	GIPSRFSGSGSGRDYSFNISNLEPEDIATYYC	LQYDNL-WT	FGGGTKLEIK	
REI	GVPNSRGSGSGTDTFTISSLQPEDIATYYC	QQYQSLPYT	FGQGTKLQIT	
La	GIPSRFSGSGSGRDYTFTISSLQPEDIATYYC	LQYDNL-WT	FGQGTKEIK	
Lb	- I - - - - R - - - - -	- - - - -	- - - - -	VE-K

FIG. 6.

09/155739

8/16

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

FR1            CDR1            CDR2  
1            2            3            4            5            6  
12345678901234567890    12345    678901234567890    012A3456789012345  
\* \* \* \* \*

21.6 EVQLQQSGAELVKGASVVKLSCTASGFNIK DTYIH CVKQRPEQGLEWIG RIDPANGYTKYDPKFQG

2\*CL QVQLVQSGAEVKKPGASVVKVSCKASGYTFT SYAMH WVRQAPGQRLEWMG WINAGNGNTKYSQKFQG  
Ha      QVQLVQSGAEVKKPGASVVKVSCKASGENIK DTYIH WVRQAPGQRLEWMB RIDPANGYTKYDPKFQG

Hb      ---FNIK--- G-----

HC      ---FNIK---

FR3            CDR3            FR4  
7            8            9            10            11  
67890123456789012ABC345678901234    567890ABCDEF12    34567890123  
\*            \*

21.6 KATITADTSSNTAYLQLSSLTSEDAVYFCAR EGYGNYGVYAMDY WGQGTSVTVSS

2\*CL RVTITRDTSASTAYMELSSLRSEDTAVYYCAR GGYGSGS----NY WGQGTLVTVSS

Ha      RVTITADTSASTAYMF RSEDTAVYYCAR EGYGNYGVYAMDY WGQGTLVTVSS

Hb      ---A-----

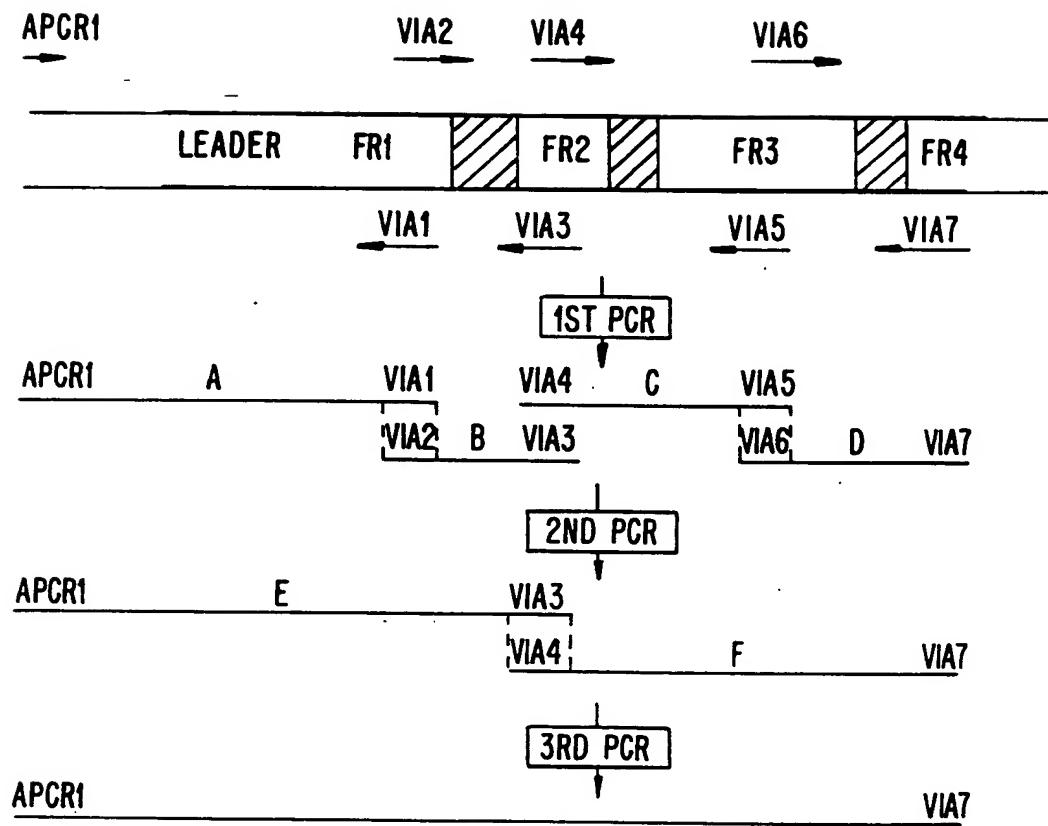
HC      ---A----- F-----

**FIG. 7.**

09/155739

9 / 16

APPROVED BY	O.G. FIG.	CLASS	SUBCLASS
	DRAFTSMAN		



*FIG. 8.*

09/15579

10/16

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

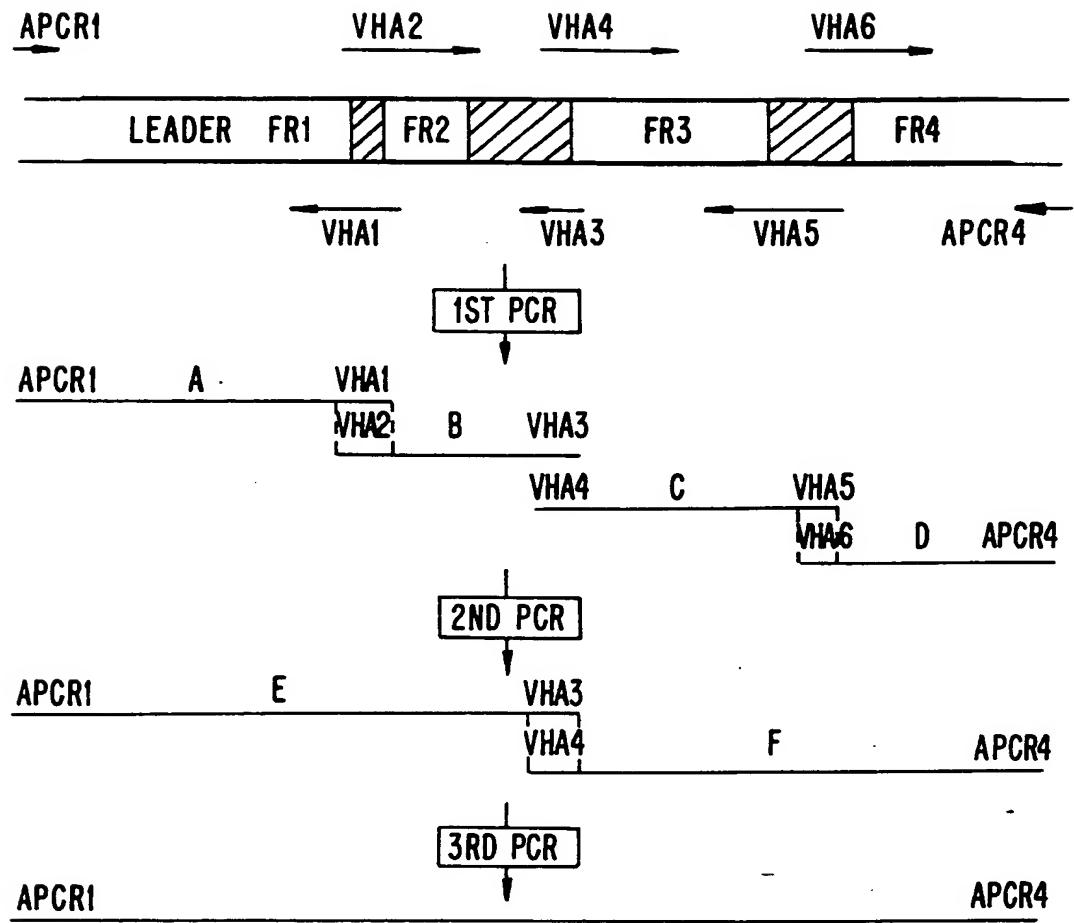
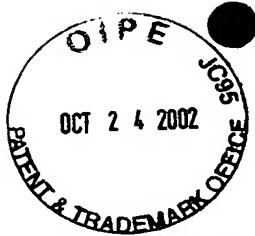


FIG. 9.



HindIII KOZAK SEQUENCE

aagcttgccgcaccatgagaccgtctattcagttcctgggctcttgttgc

1 -----  
ttcgaacggcggtggtactctggcagataagtcaaggacccgagaacaacaag  
[M R P S I Q F L G L L L F  
LEADER

55 -----  
tggcttcatggtgctcagtgacatccagatgacacagtctccatcctcactg  
accgaagtaccacaggtcacactgttaggtctactgtgtcagaggtaggagtgac  
W L H G A Q C] [D I Q M T Q S P S S L  
FR1

109 -----  
tctgcatctGTA~~g~~GA~~G~~ATAGAgtcaccatcacttgcaagacaagccaagacatt  
agacgtagaCATcctCTATCTcagtggttagtgaacgttctgtcggtctgtaa  
S A S V G D R V T I T C] [K T S Q D I  
CDR1

163 -----  
aacaagtatatggcttggtaccaaCAGACAcctggaaaaGCTcctaggctgctc  
ttgttcatataccgaaccatggttGTCTGTggacctttCGAggatccgacgag  
N K Y M A] [W Y Q Q T P G K A P R L L  
FR2

217 -----  
atacattacacatctgcattacagccaggcatccatcaagg~~t~~cagtggaa~~g~~t  
tatgtaatgttagacgtaatgtcggtccgtagggtagttccaagtcac~~tt~~ca  
I H] [Y T S A L Q P] [G I P S R F S G S  
CDR2

271 -----  
gggtctggagagattatACTttcACC~~at~~cagcAGCctgCAGcctgaagatatt  
cccagaccctcttaataTGAaagTGGtagtcgTCGacGTCggacttctataa  
G S F R D Y T F T I S S L Q P E D I  
FR3

**FIG. 10A**

APPROVED	O.G. FIG.
	SUBCLASS
BY	CLASS
DRAFTSMAN	



325 gcaacttattattgtctacagtatgataatctgtggacgttcggtCAAggcacc  
-----  
cgttgaataataaacagatgtcatactattagacacacctgcaagccaGTTccgtgg  
  
A T Y Y C] [L Q Y D N L W T] [F G Q G T  
CDR3 FR4

SPLICE DONOR SITE BamHI  
379 aagGTGaaaatcaaacgtgagtggtggatcc  
-----  
ttcCACcttagttgcactcacctagg  
  
K V E I K]

FIG. 10B

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS



HindIII KOZAK SEQUENCE

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

AAGCTTGCCGCCACCATGGACTGGACCTGGCGCGTGTTTTGCTGCTGCCGTG  
 1 -----  
 TTCGAACGGCGGTGGTACCTGACCTGGACCGCGCACAAAACGGACGAGCGGCAC  
 [M D W T W R V F C L L A V  
 LEADER  
 GCTCCTGGGGCCCACAGCCAGGTGCAACTAGTGCAGTCGGCGCCGAAGTGAAG  
 55 -----  
 CGAGGACCCCCGGGTGTCGGTCCACGTTGATCACGTCAAGGCCGCGGCTTCACCTC  
 A P G A H S] [Q V Q L V Q S G A E V K  
 AAACCCGGTGCTTCCGTGAAAGTCAGCTGTAAAGCTAGCGGTTtcaacattaaa  
 109 -----  
 TTTGGGCCACGAAGGCACTTTCAGTCGACATTGATGCCAaggttgttaattt  
 K P G A S V K V S C K A S G F N I K] [  
 FR1  
 gacacctatacacacTGGTTAGACAGGCCCTGGCAAAGGCTgGAGTGGATg  
 163 -----  
 ctgtggatatatgtgACCCAATCTGTCCGGgGaCCGGTTtCCGAcCTCACCTAc  
 D T Y I H] [W V R Q A P G Q R L E W M  
 CDR1  
 FR2  
 GGaaggattgatcctgcgaatggttataactaaatatgacccgaagttccagggc  
 217 -----  
 CCttcctaacttaggacgcttaccaatatgattatactggcttcaaggccccg  
 G] [R I D P A N G Y T K Y D P K F Q G] [  
 CDR2  
 cgggtcACCAtcACCgcaGACACCTCTgccagcACCGCCTACATGGAACGTGTC  
 271 -----  
 gcccagTGGtagTGGcgTGTGGAGAcggcgtcgTGGCGGATGTACCTTGACAGG  
 R V T I T A D T S A S T A Y M E L S  
 FR3

**FIG. 11A**



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

AGCCTGCGCTCCGAGGACACTGCAGTCTACTACTGCGCCagagagggatattat  
325 -----  
TCGGACGCGAGGCTCTGTGACGTCAGATGATGACGCGGtctccctataata  
S L R S E D T A V Y Y C A R] [E G Y Y  
ggttaactacgggtctatgctatgGACTAcTGGGGtCAaGGaACCCTTGTCA  
379 -----  
ccattgatgccccagatacgatacCTGATgACCCCaGTtCCtTGGGAACAGTGG  
G N Y G V Y A M D Y] [W G Q G T L V T  
CDR3 FR4  
SPLICE DONOR SITE BamHI  
GTCtccTCAGGTGAGTGGATCC  
433 -----  
CAGaggAGTCCACTCACCTAGG  
V S S]

FIG. 11B

09/155739

14/16

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

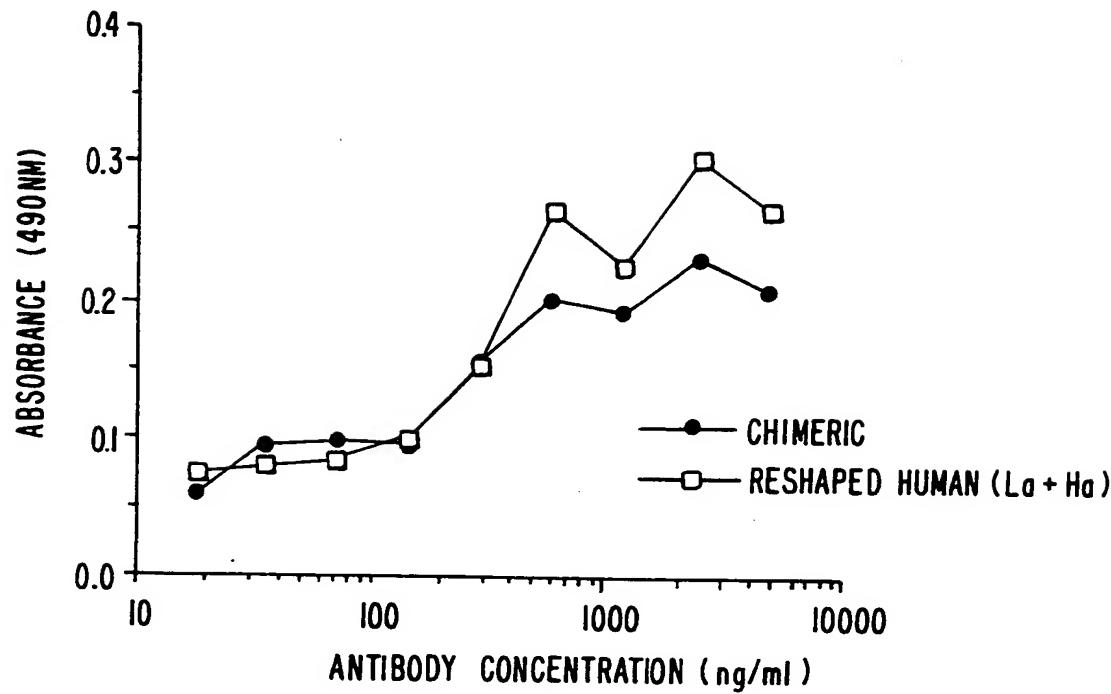


FIG. 12A.

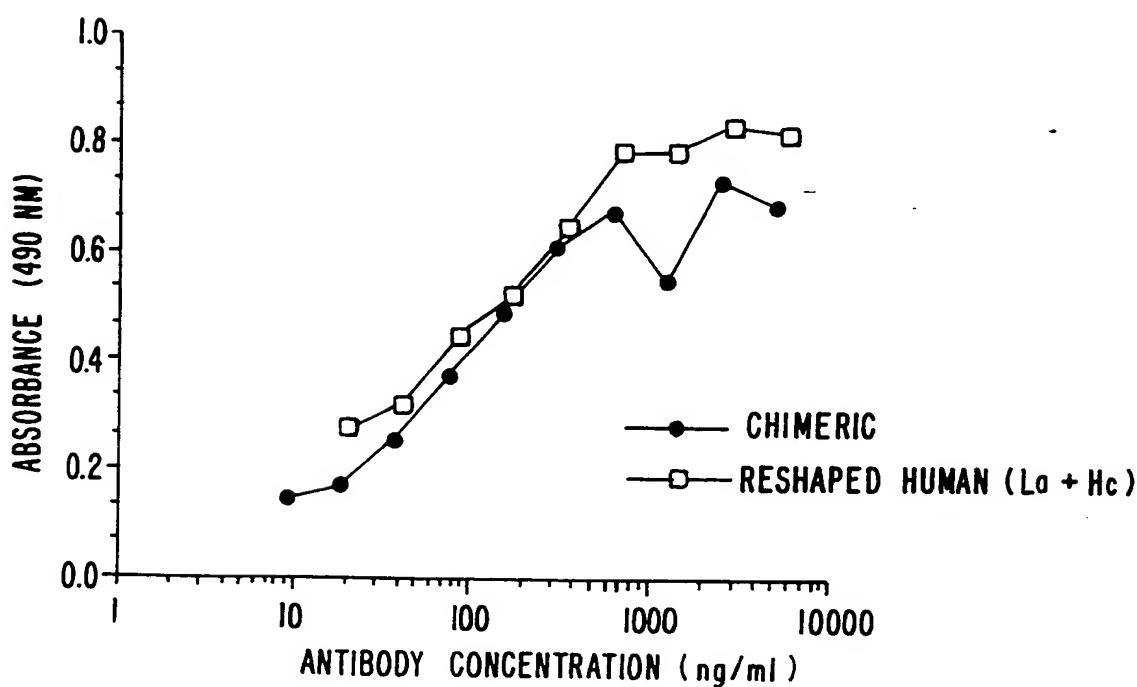


FIG. 12B.

09/155739

15/16

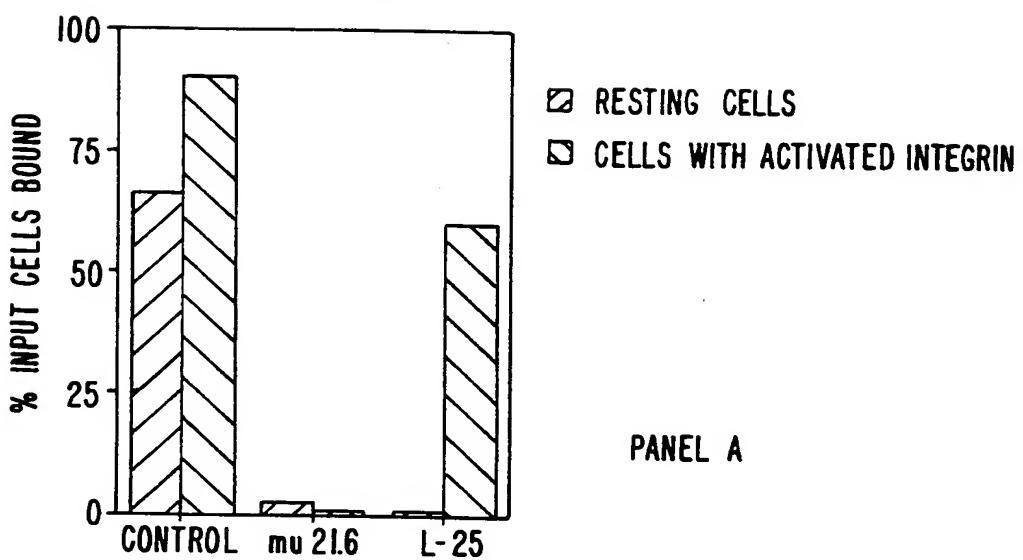


FIG. 13A.

PANEL A

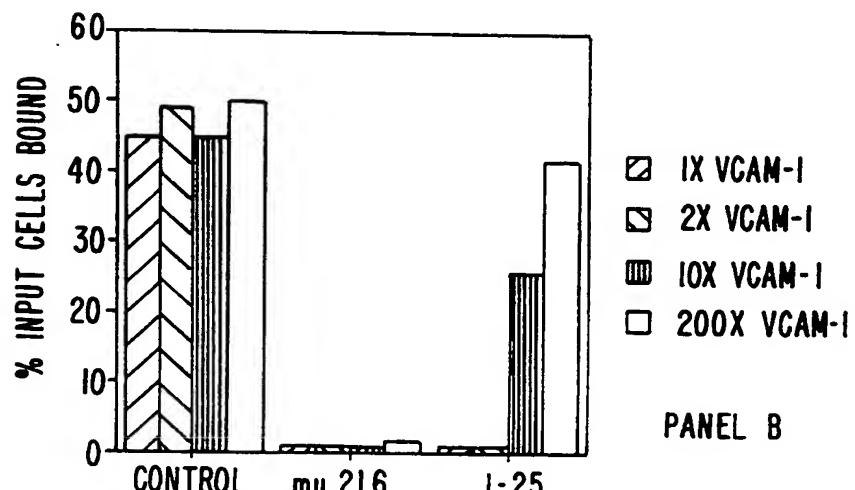


FIG. 13B.

PANEL B

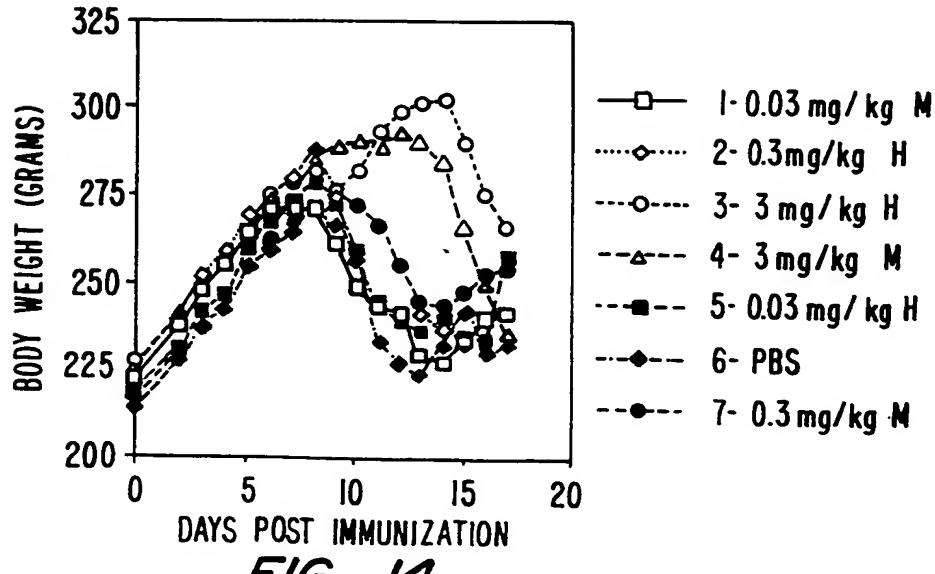


FIG. 14.

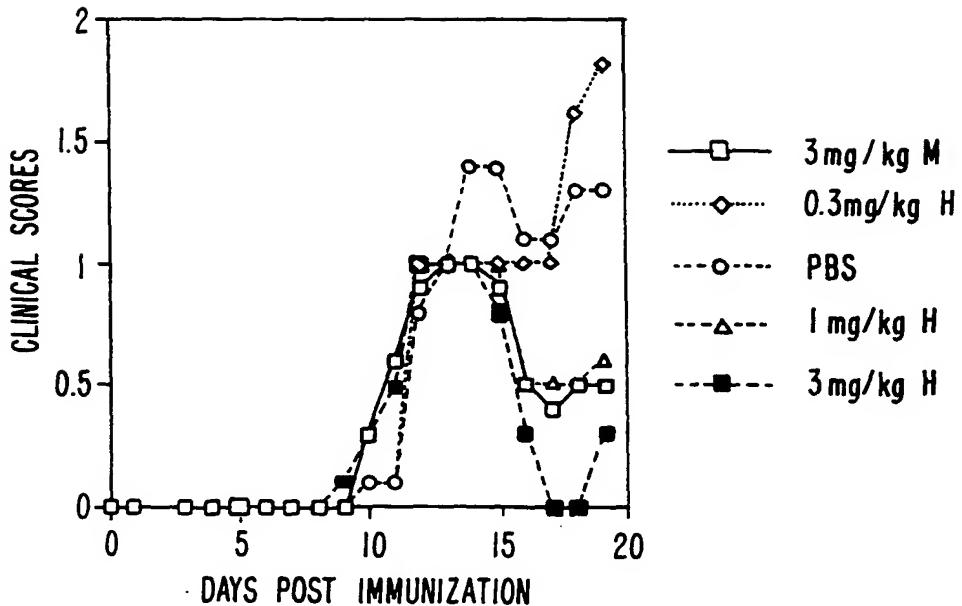
APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

CATFISH CULTURE

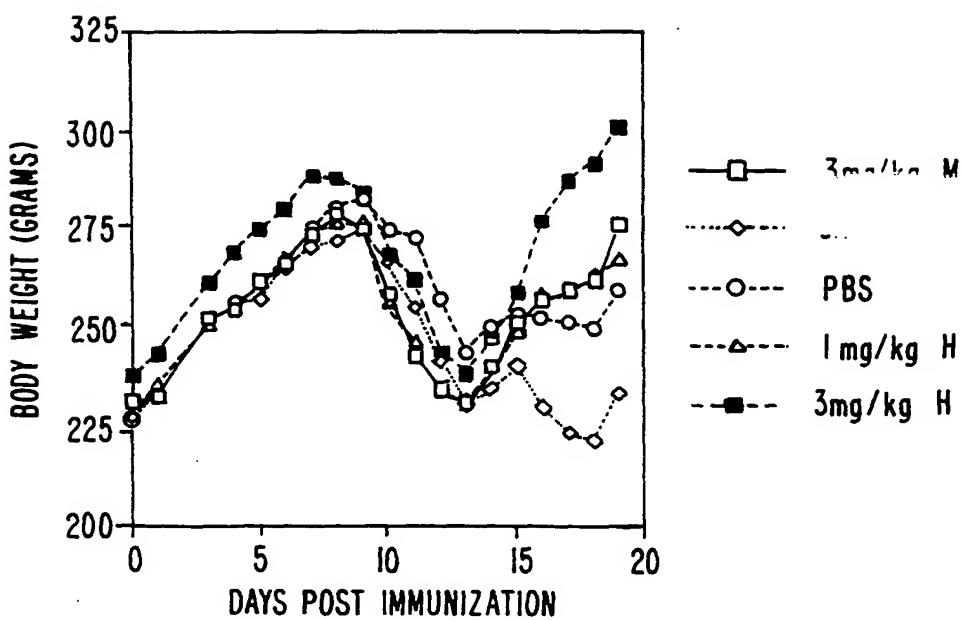
09/155739

16 / 16

APPROVED	O. G. FIG.	CLASS	SUBCLASS
BY			
		DRAFTSMAN:	



*FIG. 15.*



**FIG. 16.**